SAULT COLLEGE OF APPLIED ARTS AND TECHNOLOGY						
SAULT STE. MARIE, ONTARIO						
Sault College						
COURSE OUTLINE						
COURSE TITLE:		EMENT				
CODE NO. :	GIS 412	SEMESTER:	09S			
PROGRAM:	Geographic Information Systems Application Specialist					
AUTHOR:	Heath Bishop					
DATE:	Dec. 2008	PREVIOUS OUTLINE DATED	: Jan. 2008			
APPROVED:		B. Punch"	DATE			
	<u> </u>	CHAIR	DATE			
TOTAL CREDITS:	4					
PREREQUISITE(S):	Eligible for graduation in Year of Placement					
HOURS/WEEK:	Full time for 4	weeks – 45 credit hours				
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I. COURSE DESCRIPTION:

Students will be placed in a commercial or government GIS or remote sensing workplace where they will experience and participate in the day -to- day functions and activity. Their work habits, skills and performance will be evaluated and they will complete a technical report of a specific aspect of their work.

II. LEARNING OUTCOMES AND ELEMENTS OF THE PERFORMANCE:

Upon successful completion of this course, the student will demonstrate the ability to:

1. Successfully integrate into and perform an appropriate GIS/RS/GPS job function in an operational work setting.

Potential Elements of the Performance:

- Accept a prearranged placement, make contact with the supervisor, arrange for a start date and time and arrive to begin work.
- Accept and perform a fulltime work function as assigned, to a maximum of 40 hrs./week, for a four week period with hours and other details to be worked out with the supervisor
- Demonstrate appropriate work ethic and skill level to supervisor and coworkers
- Use the opportunity for networking to advantage in obtaining an appropriate job after the placement is completed
- Discuss and learn from the supervisor's performance evaluation at the end of the work term
- 2. Submit a technical report on an agreed to technical aspect of your fieldwork placement.

Potential Elements of the Performance:

- Discuss potential topics for a technical report with your supervisor in the first week of the placement
- Discuss and seek approval for the report topic with the GIS Coordinator at the college
- Prepare and submit the technical report following the guidelines provided later in this course outline (see evaluation section) within one week of completion of the workplace placement

III. TOPICS:

- 1. Work placement in an operational setting in GIS/RS
- 2. Technical Report on a Specific Aspect of the Work being Performed.

IV. REQUIRED RESOURCES/TEXTS/MATERIALS:

Students are responsible for their own travel and accommodation costs during the fieldwork placement (if any). Acceptable locations will be worked out with the student prior to setting up the placement. Students will need access to a computer that can produce a quality technical report incorporating appropriate computer graphics.

V. EVALUATION PROCESS/GRADING SYSTEM:

Employer's Evaluation of Work Performance - 70% Technical Report (see requirements below) - <u>30%</u> TOTAL 100%

Please note: <u>Each</u> of the Field Placement and Technical Report components must be satisfactorily completed (60% each) for a passing grade to be assigned in this course.

Eligibility for a work performance grade occurs only after a minimum of four weeks of fulltime (min. of 120 hrs) work has been completed.

Failure to satisfactorily complete the field placement component will result in an 'R' grade. The course can subsequently only be considered for repeating a year following the first attempt.

The following semester grades will be assigned to students:

Grade	Definition	Grade Point <u>Equivalent</u>
A+ A	90 – 100% 80 – 89%	4.00

Field Placement

B C D F (Fail)	70 - 79% 60 - 69% 50 – 59% 49% and below	3.00 2.00 1.00 0.00
CR (Credit)	Credit for diploma requirements has been awarded.	
S	Satisfactory achievement in field /clinical	
U	placement or non-graded subject area. Unsatisfactory achievement in field/clinical placement or non-graded	
Х	subject area. A temporary grade limited to situations with extenuating circumstances giving a student additional time to complete the requirements for a course.	
NR W	Grade not reported to Registrar's office. Student has withdrawn from the course without academic penalty.	

Guidelines and Evaluation for Technical Reports:

The technical report forms an integral part of the learning in any field placement. It is an opportunity for the student to look at a subject in detail and to report on how the software and technology used in a specific aspect of GIS/RS/GPS is used and to relate it to their prior learning. In addition, the report is an opportunity for the student to gain practice in the reporting process, an integral aspect of most positions in these times of accountability and continuous communication.

The technical report should be organized in a way that allows the writer to convey their message in a clear and understandable manner. Generally the sections will follow the following with marks for each section identified in brackets. All reports are to be fully word-processed and are to integrate appropriate GIS software into the report and/or attached figures. A title page and table of contents are expected. The first person should not be used in technical reports. The report must NOT be a narrative of the experience, but a report on the major product(s) the student produced while on the placement. If you would like to describe and/or make recommendations on your placement experience, please do so in a separate cover letter.

Summary (5) - Do an overview of the report by stating the important aspects of the purpose, method, findings and recommendations. This should be about 1/2 of a typed page but needs to be very well worded.

Introduction/Purpose (7) - Introduce the reader to the topic, when, where, why and what was done. Clearly state the purpose of the report.

Method (8) - Clearly state what was done and how, but do not give instructions to the reader. This section should be thorough but as short as possible. Be sure to include a description of all software and hardware used.

Results (20) - This section is generally in the form of tables, graphs and other figures (i.e. of a GIS nature). It might include examples of the product produced (i.e. the work that you did). Tables and figures are to be given numbers and complete titles, the latter of which should be self-explanatory to the reader (i.e. without reading the text). Units if applicable, are to be included. All maps are to be complete with scale, legend, direction etc. etc. Organization of this section will take some time.

Discussion (30) - This is the most important section as it is here where you are going to comment on what you were able to accomplish and how. Was it easy or hard? Are there better ways? What other software might have done the job faster, easier or more efficiently? What limitations were placed on you by the hardware available? Please refer to any books, Internet sites etc. you used in arriving at your comments. This section must be thorough, organized and clear. It is in this section where it becomes clear to the reader whether you have researched and understand your topic well.

Conclusions and Recommendations (10) - State what you learned and why you came to the comments you have made. Clearly state the recommendations you have for the host organization for similar future projects.

References (5) - References used in the text are to be properly listed using the author and year system. If you need help with this, please inquire before going out on the placement.

Internet references are to follow the proper format.

Appendices (5) - Appendices are put at the end to allow you to include background information or supporting documentation for the main body of the report. Each appendix is to be numbered and given a complete title. Do not put results of your work in appendices. They belong in the results section.

Overall Quality (10) - While each section will suffer if the report is not done in an appropriate manner, 10% of the mark is reserved for the overall quality. Things to be considered here are the graphics and print quality, the literary style and quality (absence of typos, sentence structure problems etc.), organization, the overall appearance and the technical quality of the report content (thoroughness, knowledge and accuracy).

Penalty for Lateness: The technical report is to be shipped to Heath Bishop, GIS Program Professor, preferably by courier, no later than one week after completion of the field placement (four weeks after the start of the placement). For a delay of each working day, there is a 10% penalty applied to the grade received.

Reports may also be e-mailed to: <u>heath.bishop@saultcollege.ca</u> but must be in Microsoft word format. All illustrations must be in a form that can be opened using standard Microsoft software (i.e. not GIS specialized software).

References Cited

References are presented on a separate page after the conclusions.

- Only those references that were incorporated in the text of your report are listed.
- References are listed in alphabetical order
- Any reference listed here must be cited in the text of your report

References must be presented in acceptable standard formats. The following are some examples for some different sources:

1. For a **paper presented in a journal**:

Garner, P. 1997. Sample sizes for length and density estimation of 0^+ fish when using point sampling by electrofishing. J. of Fish Biol. 59: 95- 106.

2. For **book** references:

Borror, D.J., D.M.DeLong, and C.A. Trilehorn.1981. An introduction to the study of insects. *5*th ed. Saunders College Publishing, Dryden Press, Philadelphia. 827PP.

Zolman, J.F. 1993. Biostatistics. Oxford University Press. New York. 226 pp

3. For a paper/chapter presented in a publication or book:

Chapman, D.W. 1978. Production Fish Populations. In <u>Ecology of Freshwater Fish</u> <u>Production</u> (S.D. Gerking, ed.). Blackwell. Oxford. 335 pp

4. For world wide web sites:

Harris, J.B. (n.d.). The return of the witch hunts. <u>Witchhunt Information Page.</u> <u>http://liguid2-sun.mit.edu/fellS.ShOrt.html</u> (2000, June 24)

General format:

- Author's name (if known)
- Date of publication or last revision (if known) in parentheses
- Title of document

- Title of complete work (if applicable), underlined
- URL in angle brackets
- Date of access, in parentheses

VI. SPECIAL NOTES:

Disability Services:

If you are a student with a disability (e.g. physical limitations, visual impairments, hearing impairments, or learning disabilities), you are encouraged to discuss required accommodations with your professor and/or the Disability Services office. Visit Room E1101 or call Extension 2703 so that support services can be arranged for you.

Retention of Course Outlines:

It is the responsibility of the student to retain all course outlines for possible future use in acquiring advanced standing at other postsecondary institutions.

Communication:

The College considers **WebCT/LMS** as the primary channel of communication for each course. Regularly checking this software platform is critical as it will keep you directly connected with faculty and current course information. Success in this course may be directly related to your willingness to take advantage of the **Learning Management System** communication tool.

Plagiarism:

Students should refer to the definition of "academic dishonesty" in *Student Code of Conduct.* Students who engage in academic dishonesty will receive an automatic failure for that submission and/or such other penalty, up to and including expulsion from the course/program, as may be decided by the professor/dean. In order to protect students from inadvertent plagiarism, to protect the copyright of the material referenced, and to credit the author of the material, it is the policy of the department to employ a documentation format for referencing source material.

Course Outline Amendments:

The professor reserves the right to change the information contained in this course outline depending on the needs of the learner and the availability of resources.

Substitute course information is available in the Registrar's office.

VII. PRIOR LEARNING ASSESSMENT:

Students who wish to apply for advance credit transfer (advanced standing) should obtain an Application for Advance Credit Form from the program coordinator (for course-specific courses), or the course coordinator (for general education courses), or the program's academic assistant. Students will be required to provide an unofficial transcript and course outline related to the course in question.

Credit for prior learning will also be given upon successful completion of a challenge exam or portfolio.